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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/771,632	02/05/2004	Norm V. Gitis		4110

7590 09/07/2005
Norm Gitis
10131 Firwood Drive
Cupertino, CA 95014

EXAMINER

WEST, PAUL M

ART UNIT	PAPER NUMBER
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2856

DATE MAILED: 09/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/771,632

Applicant(s)

GITIS ET AL.

Examiner

Paul M. West

Art Unit

2856



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 and 30-34 is/are rejected.
- 7) ☒ Claim(s) 21-29 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>02052004</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 34. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 33 and 34 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to

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one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

4. As to claims 33 and 34, the specification does not describe the first and second contacts (as identified and set forth in the base claim 30) being arranged such that one is open when the other is closed. Note that the specification describes a separate pair of "switching contacts" arranged such that one is open when the other is closed, however these are not the same "first contact" and "second contact" referred to in claims 33 and 34.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 2, 7, 8, 11, 12, 17, and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Gitis et al. (6,502,455).

7. As to claims 1, 2, 7, and 8, Gitis et al. (6,502,455) disclose a method for determining characteristics of a coating on a substrate that form an object, said method comprising: providing an apparatus comprising: means for supporting said object (Col. 4, lines 62-63), an indenter 30 for interacting with said object, a loading unit for applying a force between said object and said indenter (Col. 4, lines 61-62), means for providing relative movement between said object and said indenter (--moving stage-- Col. 4, line

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62), means for forming an electrical circuit comprising a source of electrical power, a first electrical contact, and a second electrical contact (Col. 5, lines 34-36), means for measuring electrical characteristics of said electrical circuit (Col. 4, lines 63-67); selecting the object to be a combination of a non-conductive coating with a conductive substrate (Col. 5, lines 54-57); connecting said first contact to said conductive substrate; connecting said second contact to said indenter, which is conductive (Col. 4, lines 8-11); causing relative movement between said object and said indenter (Col. 6, lines 40-41); applying a predetermined increasing force between said indenter and said coating by said loading unit (Col. 5, lines 1-2); measuring electrical contact resistance of said electrical circuit (Col. 6, lines 45-52); and determining characteristics of said coating by analyzing said electrical characteristics of said electrical circuit (Col. 5, lines 35-38).

8. As to claims 11, 12, and 17, Gitis et al. disclose detecting a moment when electrical resistance decreases below a predetermined value for a non-conductive coating and a conductive substrate (see Fig. 4b and Col. 5, lines 54-57).

9. As to claim 30, Gitis et al. disclose an apparatus for determining characteristics of a coating on a substrate that from an object, said apparatus comprising: means for supporting said object (Col. 4, lines 62-63), an indenter 30 for interacting with said object, a loading unit for applying a force between said object and said indenter (Col. 4, lines 61-62), means for providing relative movement between said object and said indenter (--moving stage-- Col. 4, line 62), means for forming an electrical circuit comprising a source of electrical power, a first electrical contact, and a second electrical contact (Col. 5, lines 34-36), means for measuring electrical characteristics of said

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electrical circuit (Col. 4, lines 63-67), and means for selectively connecting said first contact to a conductive substrate and connecting said second contact to said indenter, which is conductive (Col. 4, lines 8-11).

10. Note that while Gitis et al. do not specifically disclose an electrical circuit with two contacts and a power source, Gitis et al. do disclose measuring electrical resistance between the indenter and the substrate in which case and electrical circuit with a power source and electrical contacts as described above is inherent and implied.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 3-6, 8-10, 13-16, 18-20, 31, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gitis et al. in view of Marton (5,965,896).

13. As to claims 3-6, 8-10, 13-16, 18-20, Gitis et al. disclose a method with all of the limitations as set forth above, but do not disclose the specific type of relative movement that is caused between the indenter and the object. Marton discloses a method of wear testing a coating 13 using an indenter 5 in which relative motion between the film and the indenter is provided in both a rotary unidirectional motion and a rotary reciprocating motion (Col. 6, lines 48-50). It would have been obvious to one of ordinary skill in the art to combine the types of relative movement disclosed by Marton with the method of

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Gitis et al. because these types of relative movement efficiently provide for a large number of passes of the indenter over the surface of the coating, which Marton points out is necessary to obtain statistically significant results (Col. 3, lines 1-3).

14. As to claims 31 and 32, Gitis et al. disclose an apparatus with all of the limitations as set forth above, but do not disclose the specific type of relative movement that is caused between the indenter and the object. Marton discloses an apparatus for wear testing a coating 13 using an indenter 5 in which relative motion between the film and the indenter is provided in both a rotary unidirectional motion and a rotary reciprocating motion by means of motor 33 (Col. 6, lines 48-50). It would have been obvious to one of ordinary skill in the art to combine the types of relative movement disclosed by Marton with the apparatus of Gitis et al. because these types of relative movement efficiently provide for a large number of passes of the indenter over the surface of the coating, which Marton points out is necessary to obtain statistically significant results (Col. 3, lines 1-3).

Allowable Subject Matter

15. Claims 21-29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

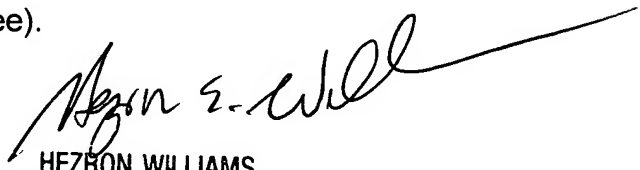
Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Note that Bonin (5,869,751) discloses an apparatus and method for testing coatings and surfaces that includes providing a force between an indenter and an object and causing relative movement.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul M. West whose telephone number is (571) 272-8590. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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